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09/749,825 Art Unit 2623
Submission of RCE in Response to October 19, 2005 Final Office Action**AMENDMENT TO THE CLAIMS**

1. (Currently Amended) A system for providing digital entertainment data, the system comprising:

multiple tuners and demodulators sending information signals to a media bus;
a system data bus coupled to the media bus and receiving the information signals;
a network bus coupled to the system data bus and receiving the information signals;

a data switch connected to the network bus, the data switch receiving the information signals and sending the information signals to having a plurality of switch ports;

a mass storage device connected to the system data bus and storing the information signals coupled to a switch port;

each of the multiple tuners each selecting a respective content item from a plurality of content items;

the a demodulators coupled to the data switch via the system data bus that is coupled to the network bus, the demodulators sending the information signals to another switch port of the plurality of switch ports of the data switch; and

the system data bus a shared communications link coupled to a third switch port of the data switch, the system data bus being shared communications link shared amongst the multiple tuners, wherein the multiple tuners each share the system data bus communications link to communicate information to the third switch port.

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4. (Currently Amended) The system of claim 1, the system further comprising an overlay processor connected between the system data bus and the media bus, the overlay processor being coupled to a fourth port of the data switch via an internal bus structure, the overlay processor superimposing multiple information signals onto a first information signal.
5. (Previously Presented) The system of claim 1, wherein the mass storage device stores an item identifier corresponding to each stored content item, the item identifier having a value that indicates the content item has been played, another value indicating the content item has been purchased, and a third value indicating the content item has been licensed.
6. (Previously Presented) The system of claim 1, wherein the mass storage device stores an item identifier corresponding to each stored content item, the item identifier storing a cost of playback for each content item and a second cost of purchase for each content item.
7. (Previously Presented) The system of claim 1, wherein a broadband data port couples to the data switch to receive a content item from a broadband data service provider, the content item downloaded and stored on the mass storage device at a data rate that is less than a playback rate in bytes per second, and the system monitoring when a remaining amount of time required to complete the download is less than a playback time of the content item, such that the system may indicate that the content item is available for playback.

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8. (Previously Presented) The system of claim 1, wherein a broadband data port couples to the data switch to receive a content item from a broadband service provider, the content item communicated from the data switch for storage at the mass storage device, the content item comprising a content item storage position identifier specifying a logical storage position in the mass storage device, and when new content items are downloaded and stored, a new content item storage position identifier is also downloaded for the content item already stored on the mass storage device.
9. (Previously Presented) The system of claim 8, further comprising a first multimedia input, the first multimedia input coupled to the multiple tuners, wherein the first multimedia input is to receive a plurality of transmission signals.
10. (Original) The system of claim 9, wherein the plurality of transmission signals include a plurality of television program signals.
11. (Original) The system of claim 9, wherein the plurality of transmission signals include an audio signal.
12. (Original) The system of claim 9, wherein the plurality of transmission signals include a data signal.
13. (Original) The system of claim 9, wherein the plurality of transmissions signals are received from a transmission facility selected from the group consisting of a direct broadcast satellite, a cable headend, and a terrestrial transmitter.

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14. (Original) The system of claim 9, wherein the plurality of transmission signals are multiplexed transmission signals selected from the group of frequency divided multiplexed transmission signals, time divided multiplexed transmission signals, code divided multiplexed transmission signals, wavelength divided multiplexed transmission signals, and dense wavelength divided multiplexed transmission signals.
15. (Previously Presented) The system of claim 1, wherein at least one of the multiple tuners selects an information channel of a plurality of information channels at least in part by receiving a plurality of transmission signals, and outputting a transmission signal of the plurality of transmission signals.
16. (Previously Presented) The system of claim 1, wherein the mass storage device receives and stores the content item.
17. (Previously Presented) The system of claim 1, wherein the data switch receives an information signal, the data switch sends the information signal to the mass storage device, and the mass storage device stores the information signal.
18. (Previously Presented) The system of claim 1, wherein an analog-to-digital converter receives an information signal, the analog-to-digital converter outputs a digital information signal, the digital information signal based at least in part on the information signal, and the mass storage device stores the digital information signal.
19. (Original) The system of claim 18, wherein the digital information signal is an Motion Pictures Expert Group 2 (MPEG-2) encoded digital information signal.

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20. (Previously Presented) The system of claim 1, wherein
 - an analog-to-digital converter receives an information signal,
 - the analog-to-digital converter outputs a digital information signal, the digital information signal based at least in part on the information signal,
 - encryption logic receives the digital information signal,
 - the encryption logic outputs an encrypted digital information signal, and
 - the mass storage device stores the encrypted digital information signal.
21. (Original) The system of claim 8, further comprising
 - a second multimedia input, the second multimedia input coupled to a switch port of the data switch, the second multimedia input to receive a multimedia signal,
 - wherein the data switch is to receive the multimedia signal.
22. (Previously Presented) The system of claim 1, further comprising
 - a plurality of broadband data communication links, each broadband data communication link coupled to a respective switch port of the data switch, and
 - a plurality of digital set top boxes, each digital set top box coupled to a respective broadband data communication link.
23. (Original) The system of claim 22, wherein the plurality of broadband data communication links are selected from the group consisting of category 5 cables, category 5e cables, category 6 cables, category 7 cables, and OC-3 cables.
24. (Previously Presented) The system of claim 22, wherein at least one digital set top box includes a digital data interface, the digital data interface to communicate with the data switch.

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25. (Previously Presented) The system of claim 22, further comprising a lower bandwidth communication interface, the lower bandwidth communication interface coupled to yet another switch port of the data switch.
26. (Original) The system of claim 25, wherein the lower bandwidth communication interface is selected from the group consisting of a Home Phoneline Networking Alliance 2.0 (HomePNA 2.0) interface, a HomeRF Shared Wireless Access Protocol (HomeRF SWAP) interface, an IEEE 802.11 interface, and a Bluetooth interface.
27. (Original) The system of claim 1, wherein the data switch is an Ethernet switch.
28. (Original) The system of claim 24, wherein the digital data interface is an Ethernet interface.
29. (Original) The system of claim 1, wherein the data switch is a router.

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30. (Currently Amended) A system for providing digital entertainment data, the system comprising:

multiple tuners and demodulators sending information signals to a media bus;
a system data bus coupled to the media bus and receiving the information signals;
a network bus coupled to the system data bus and receiving the information signals;
the multiple tuners each selecting a respective content item from a plurality of content items and each tuner producing an output signal;
a data switch connected to the network bus, the data switch receiving output signals from the multiple tuners and sending the output signals to having a plurality of switch ports;
the system data bus a shared communications link coupled between the multiple tuners and a switch port of the data switch, the system data bus being shared communications link shared amongst the multiple tuners, wherein the multiple tuners each share the system data bus communications link to communicate information to the switch port;
the a-first demodulators coupled to another switch port of the data switch, the first demodulators adapted to receive the output signals via the system data bus shared communications link to the data switch and producing a demodulated content item;-and
a mass storage device connected to the system data bus and storing, the mass storage device coupled to the data switch, the mass storage device adapted to store the demodulated content item.

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31. (Currently Amended) The system of claim 30, further comprising:

decryption logic coupled to the first demodulators;
encryption logic coupled to the decryption logic,
wherein the content item is a first encrypted information signal, the decryption logic decrypting the first encrypted information signal, the encryption logic encrypting the decrypted first encrypted information signal to generate a second encrypted information signal, the second encrypted information signal being sent to the data switch, the mass storage device storing the second encrypted information signal..
32. (Original) The system of claim 30, wherein the data switch has a plurality of high bandwidth switch ports.
33. (Original) The system of claim 32, wherein the plurality of high bandwidth switch ports include a plurality of 100Base-T Ethernet switch ports.
34. (Original) The system of claim 32, wherein the data switch has a switch port coupled to a lower bandwidth communications device.
35. (Original) The system of claim 34, wherein the lower bandwidth communications device is selected from the group consisting of a Home Phoneline Networking Alliance (HomePNA) port, a HomeRF Shared Wireless Access Protocol (SWAP) transceiver, an IEEE 802.11 transceiver, and a Bluetooth transceiver.

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36. (Currently Amended) A method of providing digital entertainment data, the method comprising:

receiving a plurality of transmission signals at multiple tuners, each transmission signal including an information signal;

selecting a first transmission signal of the plurality of transmission signals;

demodulating the first transmission signal to isolate a first information signal;

sending the first information signal over a media bus connected to a system data bus;

storing the first information signal on a mass storage device connected to the system data bus;

coupling the system data bus to a network bus;

~~sending the first information signal over the network bus to a digital data switch via a shared communications link between the data switch and the multiple tuners, the system data bus being shared communications link shared amongst the multiple tuners, wherein the multiple tuners each share the system data bus communications link to communicate information signals to the data switch; and~~

~~sending the first information signal to a first broadband communications link coupled to the digital data switch.~~

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37. (Currently Amended) The method of claim 36, wherein:
- sending the first information signal to the a digital data switch includes
sending the first information signal to an analog-to-digital converter, and
outputting a first digital information signal, the first digital information signal
based at least in part on the first information signal; and
wherein sending the first information signal to the a first broadband
communications link ~~coupled to the digital data switch~~ includes sending the first digital
information signal to the first broadband communications link coupled to the digital data
switch.
38. (Currently Amended) The method of claim 36, further comprising:
- selecting a second transmission signal of the plurality of transmission signals;
demodulating the second transmission signal to isolate a second information
signal;
sending the second information signal over the media bus connected to the system
data bus to the digital data switch; and
sending the second information signal to a second broadband communications
link coupled to the digital data switch.
39. (Previously Presented) The method of claim 36, further comprising superimposing
multiple information signals onto a single information signal.
40. (Previously Presented) The method of claim 36, further comprising storing an item
identifier corresponding to each stored information signal, the item identifier having a
value that indicates the information signal has been played, another value indicating the
information signal has been purchased, and a third value indicating the information signal
has been licensed.

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41. (Previously Presented) The method of claim 36, further comprising storing an item identifier corresponding to each stored information signal, the item identifier storing a cost of playback for each information signal and a second cost of purchase for each information signal.
42. (Previously Presented) The method of claim 36, further comprising receiving an item identifier corresponding to each information signal, the item identifier downloaded and stored on the mass storage device at a data rate that is less than a playback rate in bytes per second, and when a remaining amount of time required to complete the download is less than a playback time of the information signal, then indicating that the information signal is available for playback.
43. (Previously Presented) The method of claim 36, further comprising receiving an item identifier corresponding to the information signal, the item identifier comprising a storage position identifier specifying a logical storage position in the mass storage device, and when new information signals are downloaded and stored, a new storage position identifier is also downloaded for the information signal already stored on the mass storage device.
44. (Original) The method of claim 36, wherein the digital data switch is an Ethernet switch.
45. (Original) The method of claim 36, wherein the digital data switch is a router.
46. (Original) The method of claim 36, wherein the first broadband communication link is selected from the group consisting of a category 5 cable, a category 5e cable, a category 6 cable, a category 7 cable, and an OC-3 cable.

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47. (Original) The method of claim 44, wherein the first data communications link is selected from the group consisting of a Home Phoneline Networking Alliance (HomePNA) communications link, a HomeRF Shared Wireless Access Protocol (SWAP) communications link, an IEEE 802.11 communications link, and a Bluetooth communications link.
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